

SEMICONDUCTOR LIGHT EMITTING DEVICES INCLUDING IN-PLANE LIGHT EMITTING LAYERS

ABSTRACT OF THE DISCLOSURE

A semiconductor light emitting device includes a planar light emitting layer with a wurtzite crystal structure having a $\langle 0001 \rangle$ axis roughly parallel to the plane of the layer, referred to as an in-plane light emitting layer. The in-plane light emitting layer may include, for example, a $\{11\bar{2}0\}$ or $\{10\bar{1}0\}$ InGaN light emitting layer. In some embodiments, the in-plane light emitting layer has a thickness greater than 50 Å.